

Connecting via Winsock to STN

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LOGINID:ssplayvv1621

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\*\*\*\*\* Welcome to STN International \*\*\*\*\*

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	JAN 02	STN pricing information for 2008 now available
NEWS	3	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	4	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	5	JAN 28	MARPAT searching enhanced
NEWS	6	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	7	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	8	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS	9	FEB 08	STN Express, Version 8.3, now available
NEWS	10	FEB 20	PCI now available as a replacement to DPCI
NEWS	11	FEB 25	IFIREF reloaded with enhancements
NEWS	12	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS	13	FEB 29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification
NEWS	14	MAR 31	IFICDB, IFIPAT, and IFIUDB enhanced with new custom IPC display formats
NEWS	15	MAR 31	CAS REGISTRY enhanced with additional experimental spectra
NEWS	16	MAR 31	CA/Caplus and CASREACT patent number format for U.S. applications updated
NEWS	17	MAR 31	LPCI now available as a replacement to LDPCI
NEWS	18	MAR 31	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	19	APR 04	STN AnaVist, Version 1, to be discontinued
NEWS	20	APR 15	WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats
NEWS	21	APR 28	EMBASE Controlled Term thesaurus enhanced
NEWS	22	APR 28	IMSRESEARCH reloaded with enhancements
NEWS	23	MAY 30	INPAFAMDB now available on STN for patent family searching
NEWS	24	MAY 30	DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option
NEWS	25	JUN 06	EPFULL enhanced with 260,000 English abstracts
NEWS	26	JUN 06	KOREAPAT updated with 41,000 documents
NEWS	27	JUN 13	USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications
NEWS EXPRESS		FEBRUARY 08	CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS LOGIN			Welcome Banner and News Items
NEWS IPC8			For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that

specific topic.

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\*\*\*\*\* STN Columbus \*\*\*\*\*

FILE 'HOME' ENTERED AT 14:42:59 ON 16 JUN 2008

=> file reg		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 14:43:11 ON 16 JUN 2008  
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 JUN 2008 HIGHEST RN 1028329-25-0  
DICTIONARY FILE UPDATES: 15 JUN 2008 HIGHEST RN 1028329-25-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdnoc/properties.html>

=>  
Uploading C:\Program Files\Stnexp\Queries\10594148final.str

L1 STRUCTURE UPLOADED

=> d l1  
L1 HAS NO ANSWERS  
L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s l1  
SAMPLE SEARCH INITIATED 14:43:31 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 11621 TO ITERATE

17.2% PROCESSED 2000 ITERATIONS 2 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 225960 TO 238880  
 PROJECTED ANSWERS: 28 TO 436

L2 2 SEA SSS SAM L1

=> s l1 full

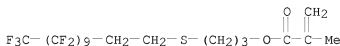
FULL SEARCH INITIATED 14:43:35 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 231132 TO ITERATE

100.0% PROCESSED 231132 ITERATIONS 59 ANSWERS  
 SEARCH TIME: 00.00.02

L3 59 SEA SSS FUL L1

=> d l3 scan

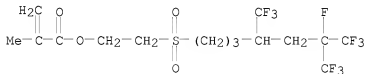
L3 59 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN 2-Propenoic acid, 2-methyl-, 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1  
 2,12,12-eicosafuorododecyl)thio]propyl ester (9CI)  
 MF C19 H15 F21 O2 S  
 CI COM



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):5

L3 59 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN 2-Propenoic acid, 2-methyl-, 2-[[6,7,7,7-tetrafluoro-4,6-  
 bis(trifluoromethyl)heptyl]sulfonyl]ethyl ester  
 MF C15 H18 F10 O4 S

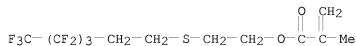


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

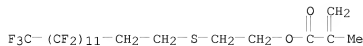
L3 59 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,1  
 2,12,12-heneicosafuorododecyl)thio]ethyl ester, polymer with  
 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorododecyl)thio]ethyl  
 2-methyl-2-propenoate, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,1  
 3,13,14,14,15,15,16,16,16-nonacosafuorohexadecyl)thio]ethyl  
 2-methyl-2-propenoate, 2-[(3,3,4,4,5,5,6,6,6-nonafluorohexyl)thio]ethyl  
 2-methyl-2-propenoate, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,1  
 3,13,14,14,14-pentacosafuorotetradecyl)thio]ethyl 2-methyl-2-propenoate,

2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl  
 2-methyl-2-propenoate and 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,1  
 2,13,13,14,14,15,15,16,16,17,17,18,18,18-tritriacontafluorooctadecyl)thio]  
 ethyl-2-methyl-2-propenoate (9CI)  
 MF (C24 H13 F33 O2 S . C22 H13 F29 O2 S . C20 H13 F25 O2 S . C18 H13 F21 O2 S  
 . C16 H13 F17 O2 S . C14 H13 F13 O2 S . C12 H13 F9 O2 S)x  
 CI PMS

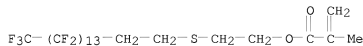
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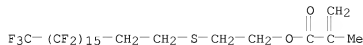
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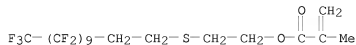
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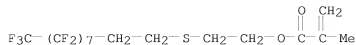
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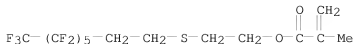
CM 5



CM 6

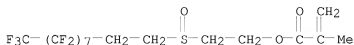


CM 7

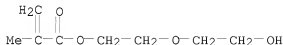


L3 59 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)sulfinyl]ethyl ester, polymer with  
 2-(2-hydroxyethoxy)ethyl 2-methyl-2-propenoate  
 MF (C16 H13 F17 O3 S . C8 H14 O4)x  
 CI PMS

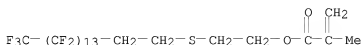
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CM 2

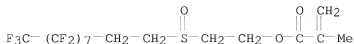


L3 59 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafluorohexadecyl)thio]ethyl ester  
 MF C22 H13 F29 O2 S  
 CI COM



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L3 59 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)sulfinyl]ethyl ester  
 MF C16 H13 F17 O3 S  
 CI COM



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

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COST IN U.S. DOLLARS                SINCE FILE      TOTAL
                                     ENTRY      SESSION
FULL ESTIMATED COST                178.36      178.57
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FILE 'CAPLUS' ENTERED AT 14:44:02 ON 16 JUN 2008  
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FILE COVERS 1907 - 16 Jun 2008 VOL 148 ISS 25  
FILE LAST UPDATED: 15 Jun 2008 (20080615/ED)

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<http://www.cas.org/legal/infopolicy.html>

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L4      20 L3

=> s l4 not py > 2005
      3556009 PY > 2005
L5      17 L4 NOT PY > 2005
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YOU HAVE REQUESTED DATA FROM 17 ANSWERS - CONTINUE? Y/(N):y
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L5 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1994:311462 CAPLUS  
DOCUMENT NUMBER: 120:311462  
ORIGINAL REFERENCE NO.: 120:54545a,54548a  
TITLE: Electrophotographic plates from lithographic plates  
and lithographic platemaking  
INVENTOR(S): Kato, Eiichi  
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	----	-----	-----
JP 05165228	A	19930702	JP 1991-336698	19911219
PRIORITY APPLN. INFO.:			JP 1991-336698	19911219
AB	In the title electrophotog. plate used for lithog. printing platemaking			

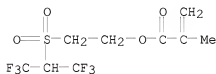
and comprised of an electroconductive support provided with  $\geq 1$  photoconductive layers and a surface cover layer, the surface cover layer utilizes  $\geq 1$  resins containing  $\geq 1$  polymer components with the functional group  $\text{SO}_2\text{CXX}_1\text{R}$  [ $\geq 1$  of  $\text{X}, \text{X}_1$  is an electron-withdrawing group; when the sum of the Hammett  $\sigma_p$  values for  $\text{X}, \text{X}_1$  is  $\geq 0.45$ , they may be the same or different from each other;  $\text{R} = \text{H}$ ,  $\text{CnH}_{2n+1}$  ( $n = 1-6$ )]. Lithog. platemaking is effected by imagewise exposing the title electrophotog. plate, developing to produce a toner image, and desensitizing the toner non-bearing areas with a hydrophilic compound containing

a substituent having a Parson's nucleophilic constant of  $\geq 5.5$ . The electrophotog. plate is capable of withstanding long-term storage under severe ambient conditions, possesses superior electrostatic properties, and produces lithog. plates with superior printing characteristics.

IT 155162-03-1P  
 RL: PREP (Preparation)  
 (preparation of, as cover layer for electrophotog. plate)  
 RN 155162-03-1 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, oxiranymethyl ester, polymer with  
 2-[[2,2,2-trifluoro-1-(trifluoromethyl)ethyl]sulfonyl]ethyl  
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

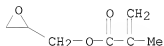
CM 1

CRN 155162-02-0  
 CMF C9 H10 F6 O4 S



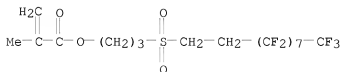
CM 2

CRN 106-91-2  
 CMF C7 H10 O3



L5 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2008 ACS ON STN  
 ACCESSION NUMBER: 1987:34576 CAPLUS  
 DOCUMENT NUMBER: 106:34576  
 ORIGINAL REFERENCE NO.: 106:5791a,5794a  
 TITLE: Perfluoroalkylsulfonoalkyl acrylates and methacrylates  
 and their use  
 INVENTOR(S): Kleiner, Eduard; Karydas, Athanasios  
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.  
 SOURCE: Eur. Pat. Appl., 19 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

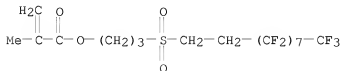
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 190993	A2	19860813	EP 1986-810042	19860124
EP 190993	A3	19860827		
EP 190993	B1	19891108		
R: BE, CH, DE, FR, GB, IT, LI, NL				
JP 61176560	A	19860808	JP 1986-12307	19860124
CA 1279653	C	19910129	CA 1986-500488	19860128
PRIORITY APPLN. INFO.:			US 1985-697593	A 19850130
OTHER SOURCE(S): MARPAT 106:34576				
AB	The esters R(CH <sub>2</sub> ) <sub>n</sub> SO <sub>2</sub> (CH <sub>2</sub> ) <sub>m</sub> O <sub>2</sub> CR <sub>1</sub> C:CH <sub>2</sub> (R = perfluoroalkyl, perfluoroalkoxy; R <sub>1</sub> = H, Me; n, m = 2-20) are polymerized to give water- and oilproofing agents for textiles. C <sub>8</sub> H <sub>17</sub> (CH <sub>2</sub> ) <sub>2</sub> SO <sub>2</sub> (CH <sub>2</sub> ) <sub>3</sub> O <sub>2</sub> CMe:CH <sub>2</sub> was polymerized by AIBN in THF and used to finish a nylon textile to give oil repellency 5 (ATCC), water spray test 70 (AATCC), and dry soil resistance 90.			
IT	106108-19-4 106108-20-7 106108-21-8 RL: USES (Uses) (oil-, water-, and soilproofing agents, for nylon)			
RN	106108-19-4 CAPLUS			
CN	2-Propenoic acid, 2-methyl-, 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)sulfonyl]propyl ester, homopolymer (9CI) (CA INDEX NAME)			
CM	1			
CRN	106108-18-3			
CMF	C17 H15 F17 O4 S			



RN 106108-20-7 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)sulfonyl]propyl ester, polymer with tridecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 106108-18-3  
 CMF C17 H15 F17 O4 S



CM 2

CRN 2495-25-2  
 CMF C17 H32 O2





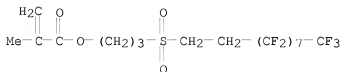
RN 106108-21-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)sulfonyl]propyl ester, polymer with 2-ethylhexyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 106108-18-3

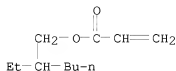
CMF C17 H15 F17 O4 S



CM 2

CRN 103-11-7

CMF C11 H20 O2

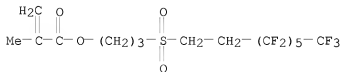


IT 106104-78-3P 106104-79-4P 106104-80-7P  
106104-81-8P

RL: IMF (Industrial manufacture); PREP (Preparation of)  
(preparation of)

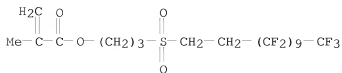
RN 106104-78-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)sulfonyl]propyl ester (CA INDEX NAME)

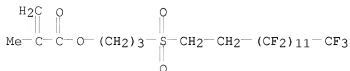


RN 106104-79-4 CAPLUS

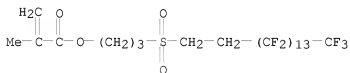
CN 2-Propenoic acid, 2-methyl-, 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl)sulfonyl]propyl ester (CA INDEX NAME)



RN 106104-80-7 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl)sulfonyl]propyl ester (CA INDEX NAME)



RN 106104-81-8 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16-nonacosafuorohexadecyl)sulfonyl]propyl ester (CA INDEX NAME)



L5 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1984:531839 CAPLUS  
 DOCUMENT NUMBER: 101:131839  
 ORIGINAL REFERENCE NO.: 101:20069a,20072a  
 TITLE: Silicon-containing polymers having an increased oxygen permeability  
 INVENTOR(S): Mueller, Karl Friedrich; Heiber, Sonia Jaworwi; Plankl, Walter L.  
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.  
 SOURCE: Eur. Pat. Appl., 62 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 109355	A1	19840523	EP 1983-810461	19831006
EP 109355	B1	19860813		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
US 4486577	A	19841204	US 1982-433743	19821012
ZA 8306219	A	19840530	ZA 1983-6219	19830823
AT 21402	T	19860815	AT 1983-810461	19831006
CA 1258935	A1	19890829	CA 1983-438619	19831007
FI 8303675	A	19840413	FI 1983-3675	19831010
FI 72736	B	19870331		
FI 72736	C	19870710		
IL 69942	A	19861031	IL 1983-69942	19831010
IN 161231	A1	19871024	IN 1983-DE698	19831010
DK 8304675	A	19840413	DK 1983-4675	19831011
DK 165751	B	19930111		
DK 165751	C	19930614		
NO 8303700	A	19840413	NO 1983-3700	19831011
NO 162244	B	19890821		
NO 162244	C	19891129		

HU 33185	A2	19841029	HU 1983-3513	19831011
HU 199520	B	19900228		
DD 218374	A5	19850206	DD 1983-255579	19831011
ES 526376	A1	19850501	ES 1983-526376	19831011
AU 575026	B2	19880721	AU 1983-20051	19831011
JP 59102914	A	19840614	JP 1983-190617	19831012
JP 06081786	B	19941019		
CS 242886	B2	19860515	CS 1983-7500	19831012
JP 06279559	A	19941004	JP 1993-225261	19930818
JP 07031313	B	19950410		

PRIORITY APPLN. INFO.:

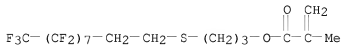
US 1982-433743	A	19821012
EP 1983-810461	A	19831006
IN 1986-DE675	A	19860724

AB Clear, strong, crosslinked polymers useful in the production of contact lenses are prepared from 8-70% siloxanes (mol. weight 400-10,000) containing  $\geq 2$  vinyl groups/5000 mol. weight, and 92-30% mono- or divinyl compds. of which 85-100% are insol. in H<sub>2</sub>O. Thus, stirring 186.6 g di-Me siloxane triol (Dow Corning oil 1248), 21.0 g isophorone diisocyanate, and 0.025 g Bu<sub>2</sub>Sn dilaurate 5 h at 50° to NCO content 1.94% and stirring 169.4 g this product with 10.2 g 2-hydroxyethyl methacrylate (I) at room temperature gave a siloxane methacrylate. Exposing a 0.1-mm layer of a mixture of this siloxane 30, I 4, Me methacrylate 66, and 1-benzoylcyclohexanol 0.2 parts on 0.1-mm polyester film to a UV lamp for 3 h gave a clear copolymer with sp. O permeability 2.43 + 10<sup>-9</sup> mL-cm/cm<sup>2</sup>-S-cm Hg, elastic modulus 2.0 GPa, and Shore D hardness 78.

IT 45311-92-0D, polymers with siloxane acrylate derivs.  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (oxygen-permeable, for contact lenses)

RN 45311-92-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl)thio]propyl ester (CA INDEX NAME)



L5 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1977:484473 CAPLUS

DOCUMENT NUMBER: 87:84473

ORIGINAL REFERENCE NO.: 87:13419a,13422a

TITLE: Nucleophilic displacements on  $\beta$ -(perfluoroalkyl)ethyl iodides. Synthesis of acrylates containing heteroatoms

AUTHOR(S): Rondestvedt, Christian S., Jr.; Thayer, Gordon L., Jr.  
 CORPORATE SOURCE: Res. Dev. Div., E. I. du Pont de Nemours and Co.,  
 Wilmington, DE, USA

SOURCE: Journal of Organic Chemistry (1977), 42(16), 2680-3  
 CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

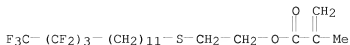
LANGUAGE: English

AB Replacement of iodine in RfCH<sub>2</sub>CH<sub>2</sub>I (Rf = perfluoroalkyl) predominates over elimination when the displacing reagent is strongly nucleophilic but only weakly basic, e.g., HS<sup>-</sup>, NCS<sup>-</sup>, and N<sub>3</sub><sup>-</sup>; in difunctional reagents HX(CH<sub>2</sub>)<sub>n</sub>YH, the order of reactivities of X and Y (different) is S > N > O. The products Rf(CH<sub>2</sub>)<sub>2</sub>X(CH<sub>2</sub>)<sub>n</sub>YH were transformed into polymerizable acrylates and methacrylates.

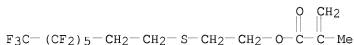
IT 35180-63-3P 36097-01-5P 36097-04-8P  
 36097-06-0P 36097-09-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

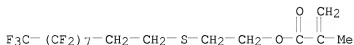
RN 35180-63-3 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[(12,12,13,13,14,14,15,15,15-nonafluoropentadecyl)thio]ethyl ester (CA INDEX NAME)



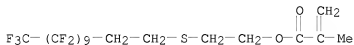
RN 36097-01-5 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl ester (CA INDEX NAME)



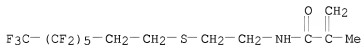
RN 36097-04-8 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]ethyl ester (CA INDEX NAME)



RN 36097-06-0 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl)thio]ethyl ester (CA INDEX NAME)



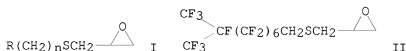
RN 36097-09-3 CAPLUS  
 CN 2-Propenamide, 2-methyl-N-[2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl]- (CA INDEX NAME)



L5 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1977:31097 CAPLUS  
 DOCUMENT NUMBER: 86:31097  
 ORIGINAL REFERENCE NO.: 86:4977a,4980a  
 TITLE: Fluorine- and sulfur-containing compositions  
 INVENTOR(S): Hager, Robert B.  
 PATENT ASSIGNEE(S): Pennwalt Corp., USA  
 SOURCE: U.S., 10 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3976698	A	19760824	US 1974-458965	19740408
GB 1437255	A	19760526	GB 1973-38075	19730810
FR 2199536	A1	19740412	FR 1973-30750	19730824
JP 49059090	A	19740607	JP 1973-94510	19730824
IT 990322	B	19750620	IT 1973-52171	19730824
FR 2207934	A1	19740621	FR 1974-1251	19740115
FR 2207934	B1	19790323		
FR 2207948	A1	19740621	FR 1974-1252	19740115
FR 2207948	B1	19780324		
FR 2207927	A1	19740621	FR 1974-1253	19740115
US 3883596	A	19750513	US 1974-459136	19740408
US 3899484	A	19750812	US 1974-459144	19740408
US 4113748	A	19780912	US 1974-459132	19740408
PRIORITY APPLN. INFO.:			US 1972-283886	A3 19720825
GI				



AB Epoxides (I; R = fluoroalkyl; n = integer) and alcs. [[R(CH<sub>2</sub>)<sub>n</sub>SCH<sub>2</sub>]<sub>2</sub>CHOH; R = fluoroalkyl; n = integer], useful in leather and textile treatment, were prepared Thus, a mixture of a solution of 4.0 g NaOH in 60 ml EtOH and

53.0 g (CF<sub>3</sub>)<sub>2</sub>CF(CF<sub>2</sub>)<sub>6</sub>CH<sub>2</sub>SH [28505-86-4] was added over a 30 min period to a solution of 93 g epichlorohydrin [106-89-8] in 50 ml EtOH at 25°, and the reaction mixture was heated to reflux for 3 hr, then cooled and diluted with 500 ml 1,1,2-trichloro-1,2,2-trifluoroethane. After cooling the reaction mixture was filtered the solvent stripped from the filtrate to leave 55.5 g crude liquid product, and the product vacuum distilled to give 45 g clear liquid epoxide (I) [52978-08-2], which was useful as an adhesion promoters and leveling agent in fluoropolymer protective coating compns. A mixture of 20 ml EtOH, 53.0 g C<sub>9</sub>F<sub>19</sub>CH<sub>2</sub>CH<sub>2</sub>SH [42512-50-5], and 2.0 g NaOH in 30 ml EtOH was mixed dropwise with 4.62 g epichlorohydrin, and the mixture was refluxed for 1 hr to give a white crystalline product [(C<sub>9</sub>F<sub>19</sub>CH<sub>2</sub>CH<sub>2</sub>)<sub>2</sub>CHOH] [60779-39-7], which could be incorporated into reactive mols. such as resins, polymers, and isocyanates.

IT 52985-02-1  
RL: USES (Uses)  
(oil and water repellents, for textiles)

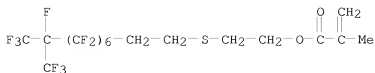
RN 52985-02-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-(trifluoromethyl)decyl]thio]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

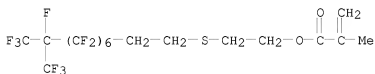
CM 1

CRN 52978-11-7

CMF C17 H13 F19 O2 S



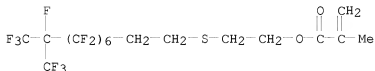
IT 52978-11-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 52978-11-7 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[[[3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-(trifluoromethyl)decyl]thio]ethyl ester (CA INDEX NAME)



L5 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1976:510229 CAPLUS  
 DOCUMENT NUMBER: 85:110229  
 ORIGINAL REFERENCE NO.: 85:17697a,17700a  
 TITLE: Fluorine and sulfur-containing compositions  
 INVENTOR(S): Hager, Robert B.; Toukan, Sameeh S.  
 PATENT ASSIGNEE(S): Pennwalt Corp., USA  
 SOURCE: U.S., 10 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3948887	A	19760406	US 1974-459258	19740408
GB 1437255	A	19760526	GB 1973-38075	19730810
FR 2199536	A1	19740412	FR 1973-30750	19730824
JP 49059090	A	19740607	JP 1973-94510	19730824
IT 990322	B	19750620	IT 1973-52171	19730824
FR 2207934	A1	19740621	FR 1974-1251	19740115
FR 2207934	B1	19790323		
FR 2207948	A1	19740621	FR 1974-1252	19740115
FR 2207948	B1	19780324		
FR 2207927	A1	19740621	FR 1974-1253	19740115
US 3883596	A	19750513	US 1974-459136	19740408
US 3899484	A	19750812	US 1974-459144	19740408
US 4113748	A	19780912	US 1974-459132	19740408
PRIORITY APPLN. INFO.:			US 1972-283886	A3 19720825
AB	The reaction of bis[(fluoroalkylthio)methyl]methanols (adhesion promoters), obtained from perfluoroalkanethiol and epoxide, with 2,4-toluene diisocyanate gave carbamates useful as oil and H2O repellent for leather, textiles and paper. Thus, 0.8% bis[perfluoro(7-methyloctyl)ethylthiomethyl]methyl phenyl 4-methyl-1,3-benzenedicarbamate solution in CH3CCl3 was sprayed onto sueded pigskin to give a specimen with 100+ oil and 100-H2O initial repellency rating (AATCC Standard Test method 52-1952).			
IT 52978-11-7P	RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)			

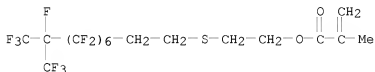
(preparation and polymerization of)  
 RN 52978-11-7 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[[[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-(trifluoromethyl)decyl]thio]ethyl ester (CA INDEX NAME)



IT 52985-02-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 52985-02-1 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[[[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-(trifluoromethyl)decyl]thio]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

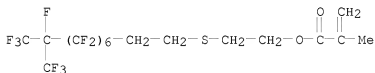
CRN 52978-11-7  
 CMF C17 H13 F19 O2 S



L5 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1976:5826 CAPLUS  
 DOCUMENT NUMBER: 84:5826  
 ORIGINAL REFERENCE NO.: 84:987a,990a  
 TITLE: Oil and water repellent fluorine and sulfur-containing polymers  
 INVENTOR(S): Hager, Robert B.; Toukan, Sameeh S.; Walter, Gerald J.  
 PATENT ASSIGNEE(S): Pennwalt Corp., USA  
 SOURCE: U.S., 9 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 3893984	A	19750708	US 1974-459137	19740408
GB 1437255	A	19760526	GB 1973-38075	19730810
FR 2199536	A1	19740412	FR 1973-30750	19730824
JP 49059090	A	19740607	JP 1973-94510	19730824
IT 990322	B	19750620	IT 1973-52171	19730824
FR 2207934	A1	19740621	FR 1974-1251	19740115
FR 2207934	B1	19790323		
FR 2207948	A1	19740621	FR 1974-1252	19740115
FR 2207948	B1	19780324		
FR 2207927	A1	19740621	FR 1974-1253	19740115
US 3883596	A	19750513	US 1974-459136	19740408

US 3899484 A 19750812 US 1974-459144 19740408  
 US 4113748 A 19780912 US 1974-459132 19740408  
 PRIORITY APPLN. INFO.: US 1972-283886 A3 19720825  
 AB [(CF3)2CF(CF2)6CH2CH2SCH2]2CHOH (I) [40099-98-7] was prepared and esterified to give I methacrylate (II) [53122-43-3], which was polymerizable to give a product useful as an oil and water repellent for textiles, leather, and paper. E.g., to an EtOH solution of 53.0 g (CF3)2CF(CF2)6CH2CH2SCH [28505-86-4] and 2.0 g NaOH was added dropwise 4.62 g epichlorohydrin [106-89-8], and the mixture was refluxed 1 hr to give 94% I, m. 78-80°. A mixture of I 112, Et3N 12.1, and methacryloyl chloride [920-46-7] 12.5 g was refluxed 1 hr to give II in good yield. The preparation and uses of other compds., e.g., (CF3)2CF(CF2)6CH2CH2SCH2CH(OH)CH2OH [41945-92-0], its methacrylate esters, and I derivs. and reaction products with isocyanates and active H compds., were also described.  
 IT 52978-11-7P  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 52978-11-7 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[[[3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-(trifluoromethyl)decyl]thio]ethyl ester (CA INDEX NAME)



L5 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2008 ACS ON STN  
 ACCESSION NUMBER: 1975:581047 CAPLUS  
 DOCUMENT NUMBER: 83:181047  
 ORIGINAL REFERENCE NO.: 83:28453a,28456a  
 TITLE: Perfluoroalkyl thio ether alcohols, esters, and their polymers  
 INVENTOR(S): Kleiner, Edward K.; Knell, Martin  
 PATENT ASSIGNEE(S): Ciba-Geigy Corp., USA  
 SOURCE: U.S., 10 pp. Division of U.S. 3,763,116.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3884879	A	19750520	US 1973-355640	19730430
US 3763116	A	19731002	US 1972-299487	19721020
PRIORITY APPLN. INFO.:			US 1968-720370	A2 19680410
			US 1971-199793	A2 19711117
			US 1972-299487	A3 19721020
AB			6-Perfluoroalkyl-4-thia-1-hexanols were refluxed with fumaryl chloride (I) [627-63-4] or itaconyl chloride [1931-60-8] to give the corresp. esters which were copolymd. with hydroxybutyl vinyl ether (II), Me vinyl ether, styrene, or vinyl acetate to give oil- and water-resistant fluoropolymers used as films and as textile finishing agents. Thus, I refluxed with 6-perfluorooctyl-4-thia-1-hexanol [36880-07-6] gave a diester [43030-39-3] which was copolymd. with II in hexafluoroxylene to give a copolymer [56927-76-5] that oil- and waterproofed polyester and cotton-polyester fabrics.	
IT			56927-80-1 56927-81-2 56927-82-3 RL: USES (Uses)	



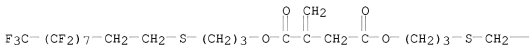
(oil- and water-resistant films and textile finishing agents)  
 RN 56927-80-1 CAPLUS  
 CN Butanedioic acid, methylene-, bis[3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]propyl] ester, polymer with 4-(ethenyloxy)-1-butanol (9CI) (CA INDEX NAME)

CM 1

CRN 56927-79-8

CMF C31 H24 F34 O4 S2

PAGE 1-A



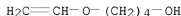
PAGE 1-B



CM 2

CRN 17832-28-9

CMF C6 H12 O2



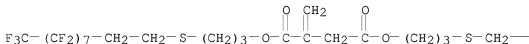
RN 56927-81-2 CAPLUS  
 CN Butanedioic acid, methylene-, bis[3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]propyl] ester, polymer with methoxyethene (9CI) (CA INDEX NAME)

CM 1

CRN 56927-79-8

CMF C31 H24 F34 O4 S2

PAGE 1-A



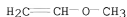
PAGE 1-B



CM 2

CRN 107-25-5

CMF C3 H6 O



RN 56927-82-3 CAPLUS

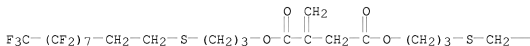
CN Butanedioic acid, methylene-, bis[3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl)thio]propyl] ester, polymer with ethenylbenzene (9CI)  
(CA INDEX NAME)

CM 1

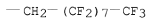
CRN 56927-79-8

CMF C31 H24 F34 O4 S2

PAGE 1-A



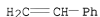
PAGE 1-B



CM 2

CRN 100-42-5

CMF C8 H8



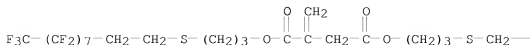
IT 56927-79-8P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and polymerization of)

RN 56927-79-8 CAPLUS

CN Butanedioic acid, methylene-, bis[3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl)thio]propyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



—CH<sub>2</sub>—(CF<sub>2</sub>)<sub>7</sub>—CF<sub>3</sub>

L5 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1975:59818 CAPLUS

DOCUMENT NUMBER: 82:59818

ORIGINAL REFERENCE NO.: 82:9571a,9574a

TITLE: Fluorinated acrylic monomers containing hetero atoms and their polymers

INVENTOR(S): Rondestvedt, Christian S., Jr.

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co.

SOURCE: U.S., 8 pp. Division of U.S. 3,655,732 (CA 77:21457j).  
CODEN: USXXAM

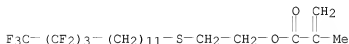
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 3808251	A	19740430	US 1971-199328	19711116
	US 3655732	A	19720411	US 1967-638721	19670516
PRIORITY APPLN. INFO.:				US 1967-638721	A3 19670516
AB	CnF <sub>2n+1</sub> (CH <sub>2</sub> )mS(CH <sub>2</sub> ) <sub>2</sub> O <sub>2</sub> CCR:CH <sub>2</sub> (I, n = 4-16, m = 2 or 11, R = H or Me), C <sub>6</sub> F <sub>11</sub> (CH <sub>2</sub> ) <sub>2</sub> S(CH <sub>2</sub> ) <sub>2</sub> NHCOCMe:CH <sub>2</sub> , or the products of C <sub>6</sub> H <sub>13</sub> (CH <sub>2</sub> ) <sub>2</sub> S(CH <sub>2</sub> ) <sub>2</sub> SH [36097-07-1] or C <sub>6</sub> F <sub>13</sub> (CH <sub>2</sub> ) <sub>2</sub> NH(CH <sub>2</sub> ) <sub>2</sub> OH hydrochloride [36097-10-6] with methacrylyl chloride (II) [920-46-7] were polymerized to give oil- and water-repellents for cotton textiles. Thus, C <sub>4</sub> F <sub>9</sub> (CH <sub>2</sub> ) <sub>11</sub> S(CH <sub>2</sub> ) <sub>2</sub> OH [36096-98-7] was treated with I and C <sub>5</sub> H <sub>5</sub> N in Et <sub>2</sub> O to give I (n = 4, m = 11, R = Me) which was polymerized in the presence of azobisisobutylnitrile to give C <sub>4</sub> F <sub>9</sub> (CH <sub>2</sub> ) <sub>11</sub> S(CH <sub>2</sub> ) <sub>2</sub> O <sub>2</sub> CCMe:CH <sub>2</sub> polymer [35165-52-7] which exhibited an oil repellency of 2 and water repellency of 70 at a 4% loading on cotton fabric.				
IT	35165-52-7	36642-82-7	36657-74-6		
	36683-03-1				
RL:	USES (Uses) (oilproofing and waterproofing agents, for cotton textiles)				
RN	35165-52-7	CAPLUS			
CN	2-Propenoic acid, 2-methyl-, 2-[(12,12,13,13,14,14,15,15,15-nonafluoropentadecyl)thio]ethyl ester, homopolymer (9CI) (CA INDEX NAME)				
CM	1				
CRN	35180-63-3				
CMF	C21 H31 F9 O2 S				

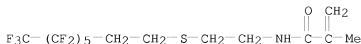


RN 36642-82-7 CAPLUS

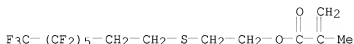
CN 2-Propenamide, 2-methyl-N-[2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

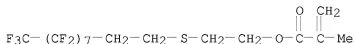
CRN 36097-09-3  
CMF C14 H14 F13 N O S



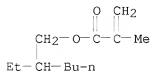
RN 36657-74-6 CAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl ester, homopolymer (9CI) (CA INDEX NAME)  
CM 1  
CRN 36097-01-5  
CMF C14 H13 F13 O2 S



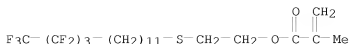
RN 36683-03-1 CAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)  
CM 1  
CRN 36097-04-8  
CMF C16 H13 F17 O2 S



CM 2  
CRN 688-84-6  
CMF C12 H22 O2

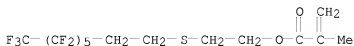


IT 35180-63-3P 36097-01-5P 36097-04-8P  
36097-06-0P 36097-09-3P 52553-23-8P  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of)  
RN 35180-63-3 CAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-[(12,12,13,13,14,14,15,15,15-nonafluoropentadecyl)thio]ethyl ester (CA INDEX NAME)



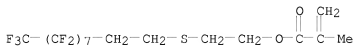
RN 36097-01-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl ester (CA INDEX NAME)



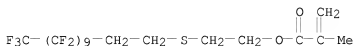
RN 36097-04-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]ethyl ester (CA INDEX NAME)



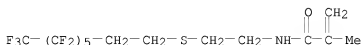
RN 36097-06-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl)thio]ethyl ester (CA INDEX NAME)



RN 36097-09-3 CAPLUS

CN 2-Propenamide, 2-methyl-N-[2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl]- (CA INDEX NAME)



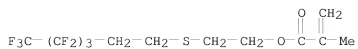
RN 52553-23-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorodecyl)thio]ethyl ester, polymer with 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]ethyl 2-methyl-2-propenoate, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,16-nonacosafuorohexadecyl)thio]ethyl 2-methyl-2-propenoate, 2-[(3,3,4,4,5,5,6,6,6-nonafluorohexyl)thio]ethyl 2-methyl-2-propenoate, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-pentacosafuorotetradecyl)thio]ethyl 2-methyl-2-propenoate, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl 2-methyl-2-propenoate and 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,15,15,16,16,17,17,18,18,18-tritriacontafuorooctadecyl)thio]ethyl-2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 52553-22-7

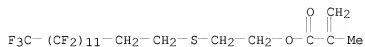
CMF C12 H13 F9 O2 S



CM 2

CRN 52553-21-6

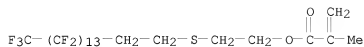
CMF C20 H13 F25 O2 S



CM 3

CRN 52553-20-5

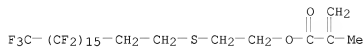
CMF C22 H13 F29 O2 S



CM 4

CRN 52553-19-2

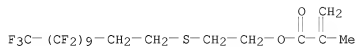
CMF C24 H13 F33 O2 S



CM 5

CRN 36097-06-0

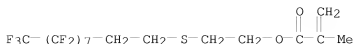
CMF C18 H13 F21 O2 S



CM 6

CRN 36097-04-8

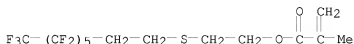
CMF C16 H13 F17 O2 S



CM 7

CRN 36097-01-5

CMF C14 H13 F13 O2 S



L5 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1974:553076 CAPLUS

DOCUMENT NUMBER: 81:153076

ORIGINAL REFERENCE NO.: 81:23861a,23864a

TITLE: Sulfur-containing fluorocarbons

INVENTOR(S): Hager, Robert B.; Toukan, Sameeh S.; Walter, Gerald Joseph

PATENT ASSIGNEE(S): Pennwalt Corp.

SOURCE: Ger. Offen., 31 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2342888	A1	19740307	DE 1973-2342888	19730824
GB 1437255	A	19760526	GB 1973-38075	19730810
FR 2199536	A1	19740412	FR 1973-30750	19730824
JP 49059090	A	19740607	JP 1973-94510	19730824
IT 990322	B	19750620	IT 1973-52171	19730824
FR 2207934	A1	19740621	FR 1974-1251	19740115
FR 2207934	B1	19790323		
FR 2207948	A1	19740621	FR 1974-1252	19740115
FR 2207948	B1	19780324		
FR 2207927	A1	19740621	FR 1974-1253	19740115
US 3883596	A	19750513	US 1974-459136	19740408
US 3899484	A	19750812	US 1974-459144	19740408
US 4113748	A	19780912	US 1974-459132	19740408
PRIORITY APPLN. INFO.:			US 1972-283886	A 19720825
AB	Bis[2-[7-(trifluoromethyl)perfluorooctyl]ethylthio]methylmethanol (I) [40099-98-7], 3-[2-[7-(trifluoromethyl)perfluorooctyl]ethylthio]-1,2-propanediol [41945-92-0], and 2-[2-[7-(trifluoromethyl)perfluorooctyl]ethylthio]ethanol [52978-10-6] were prepared and used in the preparation of urethane, alkyd, acrylate, and other resins useful as oil- and water-repellent coatings on leather, textiles, etc. Thus, 2-[7-(trifluoromethyl)perfluorooctyl]ethanethiol [28505-86-4] in EtOH was treated slowly with NaOH and epichlorohydrin [106-89-8] to prepare I which (0.0315 mole) was added to the reaction product of 0.094 mole 2,4-tolylene diisocyanate [584-84-9] and 0.0315 mole trimethylolpropane [77-99-6] to prepare a product, containing isocyanate groups, useful for water- and oil-repellent finishing of leather or for further reactions.			
IT	52985-02-1			

RL: USES (Uses)

(oil- and water-resistant finishes, for textiles)

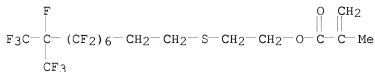
RN 52985-02-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-(trifluoromethyl)decyl]thio]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 52978-11-7

CMF C17 H13 F19 O2 S



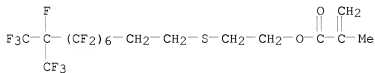
IT 52978-11-7P

RL: PREP (Preparation)

(preparation of)

RN 52978-11-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-(trifluoromethyl)decyl]thio]ethyl ester (CA INDEX NAME)



L5 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1974:451047 CAPLUS

DOCUMENT NUMBER: 81:51047

ORIGINAL REFERENCE NO.: 81:8155a,8158a

TITLE: Fluorinated acrylic monomers containing hetero atoms and their polymers

INVENTOR(S): Rondestvedt, Christian S., Jr.

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co.

SOURCE: U.S., 8 pp. Division of U.S. 3,655,732 (CA 77:21457j).

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3786089	A	19740115	US 1971-199316	19711116
US 3655732	A	19720411	US 1967-638721	19670516
PRIORITY APPLN. INFO.:			US 1967-638721	A3 19670516

AB Poly[N-(5-perfluorohexyl-3-thiapentyl)methacrylamide] (I) [36642-82-7], poly(5-perfluorohexyl-3-thiapentyl methacrylate) [36657-74-6], and 7 similar polymers, useful as oil and water repellent finishes on textiles, are prepared. Thus, a refluxing mixture of 100 ml tert-BuOH, 8.1 g NaOH, and 11.4 g 2-aminoethanethiol-HCl [156-57-0] was treated with 47.4 g 1-(2-iodoethyl)tridecafluorohexane [2043-57-4] during 15 min to prepare 30 g 1-(5-amino-3-thiapentyl)tridecafluorohexane



[36097-08-2], and this compound was treated with methacryloyl chloride [920-46-7] in the presence of pyridine to give 57% N-(5-perfluorohexyl-3-thiapentyl)-methacrylamide [36097-09-3] which was polymerized in 2.6:11.4 CFC12CF2Cl-CFC12CFC12 in the presence of AIBN to give I. Cotton fabric treated with I (in CFC12CF2Cl) resisted wetting by decane or water.

IT 35165-52-7 36642-82-7 36657-74-6 36683-03-1

RL: TEM (Technical or engineered material use); USES (Uses)  
(cotton textiles containing, for oil and water repellency)

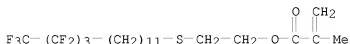
RN 35165-52-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(12,12,13,13,14,14,15,15,15-nonafluoropentadecyl)thio]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 35180-63-3

CMF C21 H31 F9 O2 S



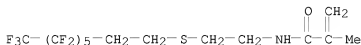
RN 36642-82-7 CAPLUS

CN 2-Propenamide, 2-methyl-N-[2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 36097-09-3

CMF C14 H14 F13 N O S



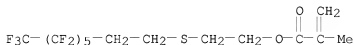
RN 36657-74-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 36097-01-5

CMF C14 H13 F13 O2 S



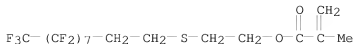
RN 36683-03-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 36097-04-8

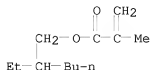
CMF C16 H13 F17 O2 S



CM 2

CRN 688-84-6

CMF C12 H22 O2



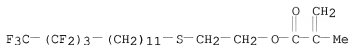
IT 35180-63-3P 36097-01-5P 36097-04-8P

36097-06-0P 36097-09-3P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of)

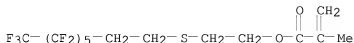
RN 35180-63-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(12,12,13,13,14,14,15,15,15-nonafluoropentadecyl)thio]ethyl ester (CA INDEX NAME)



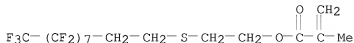
RN 36097-01-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl ester (CA INDEX NAME)



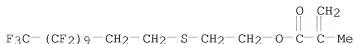
RN 36097-04-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl)thio]ethyl ester (CA INDEX NAME)

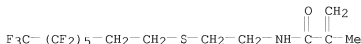


RN 36097-06-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl)thio]ethyl ester (CA INDEX NAME)



RN 36097-09-3 CAPLUS  
 CN 2-Propenamide, 2-methyl-N-[2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl]- (CA INDEX NAME)



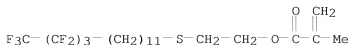
L5 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1974:84661 CAPLUS  
 DOCUMENT NUMBER: 80:84661  
 ORIGINAL REFERENCE NO.: 80:13637a,13640a  
 TITLE: Fluorinated acrylic monomers containing hetero atoms  
 INVENTOR(S): Rondestvedt, Christian S., Jr.  
 PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co.  
 SOURCE: U.S., 8 pp. Division of U. S. 3,655,732 (CA 77:21457j).  
 CODEN: USXXAM

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 3773826	A	19731120	US 1971-199329	19711116
	US 3655732	A	19720411	US 1967-638721	19670516
PRIORITY APPLN. INFO.:				US 1967-638721	A3 19670516
AB	Several fluorinated acrylates and (or) methacrylates were prepared, copolymd. with an F-free vinylidene compound, and used as water- and oil repellants for cotton textiles. Thus 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl iodide [2043-57-4] was refluxed with 2-mercaptoethanol [60-24-2] and worked up to give 82% 2-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctylthio)ethanol [36097-00-4] which was converted to 2-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctylthio)ethyl methacrylate (I) [36097-01-5]. Cotton fabrics treated with poly(2-ethylhexyl methacrylate) [25719-51-1] and poly[2-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctylthio)ethyl methacrylate] [36657-74-6] had initial oil repellency 6 (excellent, in a standard test) and water repellency 90 (A. A. T. C. C. 22-1952); after 3 launderings the values were 4 and 80, resp.				
IT	35165-52-7	36642-82-7	36657-74-6		
	51044-53-2				
RL: USES (Uses)	(oil- and waterproofing by, of cotton textiles)				
RN	35165-52-7	CAPLUS			
CN	2-Propenoic acid, 2-methyl-, 2-[(12,12,13,13,14,14,15,15,15-nonafluoropentadecyl)thio]ethyl ester, homopolymer (9CI) (CA INDEX NAME)				

CM 1

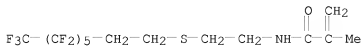
CRN 35180-63-3  
 CMF C21 H31 F9 O2 S



RN 36642-82-7 CAPLUS  
CN 2-Propenamide, 2-methyl-N-[2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

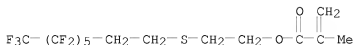
CRN 36097-09-3  
CMF C14 H14 F13 N O S



RN 36657-74-6 CAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

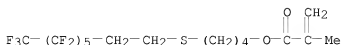
CRN 36097-01-5  
CMF C14 H13 F13 O2 S



RN 51044-53-2 CAPLUS  
CN 2-Propenoic acid, 2-methyl-, 4-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]butyl ester, homopolymer (9CI) (CA INDEX NAME)

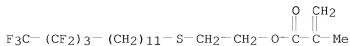
CM 1

CRN 51044-52-1  
CMF C16 H17 F13 O2 S

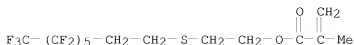


IT 35180-63-3P 36097-01-5P 36097-04-8P  
36097-06-0P 36097-09-3P  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of)

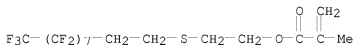
RN 35180-63-3 CAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-[(12,12,13,13,14,14,15,15,15-nonafluoropentadecyl)thio]ethyl ester (CA INDEX NAME)



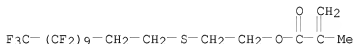
RN 36097-01-5 CAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl ester (CA INDEX NAME)



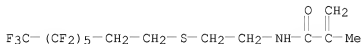
RN 36097-04-8 CAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorododecyl)thio]ethyl ester (CA INDEX NAME)



RN 36097-06-0 CAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl)thio]ethyl ester (CA INDEX NAME)



RN 36097-09-3 CAPLUS  
CN 2-Propenamide, 2-methyl-N-[2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl]- (CA INDEX NAME)



L5 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1973:420652 CAPLUS  
DOCUMENT NUMBER: 79:20652  
ORIGINAL REFERENCE NO.: 79:3315a,3318a  
TITLE: Surface-active fluorinated alkyl sulfides  
INVENTOR(S): Toukan, Sameeh Said; Hauptschein, Murray  
PATENT ASSIGNEE(S): Pennwalt Corp.  
SOURCE: Ger. Offen., 26 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2239709	A1	19730222	DE 1972-2239709	19720811
CA 962281	A1	19750204	CA 1972-145564	19720623
GB 1395955	A	19750529	GB 1972-35227	19720727
NL 7210982	A	19730214	NL 1972-10982	19720811
FR 2150116	A5	19730330	FR 1972-29239	19720811
JP 48026714	A	19730409	JP 1972-80040	19720811
JP 57047187	B	19821007		

PRIORITY APPLN. INFO.: US 1971-171325 A 19710812  
AB Eleven title compds., i.e. bis[2-[7-(trifluoromethyl)perfluorooctyl]ethylthiomethyl]methanol (I) [40099-98-7] and (F3C)2CF(CF2)nCH2CH2SX [II; n = 4

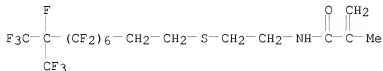
or 6; X = CH<sub>2</sub>CH(OH)CH<sub>2</sub>OH, CH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>H, CH<sub>2</sub>CH<sub>2</sub>NMe<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub>, 4-pyridyl, 2-benzimidazolyl, 2-pyrimidyl, o-carboxyphenyl, or 3,5-dichloro-2-pyridyl] and their derivs., e.g. carbamates or chloroacetates, were prepared without olefin formation in 33-100% yield by reaction of (F<sub>3</sub>C)2CF(CF<sub>2</sub>)<sub>n</sub>CH<sub>2</sub>CH<sub>2</sub>I (III) with (HSCH<sub>2</sub>)<sub>2</sub>CHOH (IV) and HSR, resp., in the presence of NaOH in a polar solvent, e.g. EtOH. I and II were partly used as surface-active agents and useful as insecticides. Thus, IV was added to NaOH-EtOH, the mixture heated 5-10 min at .sim.50.deg., added to III (n = 6) in EtOH, and the mixture refluxed 1 hr to give 81% I.

IT 41946-07-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 41946-07-0 CAPLUS

CN 2-Propenamide, N-[2-[3,3,4,4,5,5,6,6,7,7,8,8,9,10,10,10-hexadecafluoro-9-(trifluoromethyl)decyl]thio]ethyl]-2-methyl- (CA INDEX NAME)



L5 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1973:17568 CAPLUS

DOCUMENT NUMBER: 78:17568

ORIGINAL REFERENCE NO.: 78:2793a

TITLE: Oil and soil repellent impregnants for textiles

INVENTOR(S): Bloechl, Walter

SOURCE: Ger. Offen., 23 pp. Division of Ger. Offen. 2,110,912.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2120813	A	19720928	DE 1971-2120813	19710308
PRIORITY APPLN. INFO.:			DE 1971-2120813	19710308

AB The highly active, water-repelling, chemical and thermally stable title impregnants, which pollute waste water (on washing) only, slightly, consisted of 2-ethylhexyl methacrylate-3-( $\alpha,\alpha,\beta,\beta$ -tetrahydroperfluorodecylthio)propyl methacrylate-2-hydroxyethyl methacrylate-N-methylolacrylamide copolymer (I) [37745-81-6] and optionally the extender isooctyl methacrylate-ethylene glycol dimethacrylate-methylolacrylamide copolymer [37203-31-9]. Thus, reaction of C<sub>8</sub>H<sub>17</sub>(CH<sub>2</sub>)<sub>2</sub>SH with EtONa-EtOH, addition of Cl(CH<sub>2</sub>)<sub>3</sub>OH, heating 6 hr at 40.deg., and refluxing for 20 hr gave 87% 3-( $\alpha,\alpha,\beta,\beta$ -tetrahydroperfluorodecylthio)propanol (II) [36880-07-6]. Nine analogs (oxy in place of thio) and homologs of II were prepared similarly or by other known methods. II methacrylate 60, 2-ethylhexyl methacrylate 15, stearyltrimethylammonium bromide 5, H<sub>2</sub>O 100, and Me<sub>2</sub>CO 30 g were emulsified, 0.2 g 2-hydroxyethyl methacrylate and 0.336 g 60% aqueous N-methylolacrylamide added, the mixture was flushed with N for 1 hr, 0.3 g dodecyl mercaptan and 0.4 g K<sub>2</sub>S<sub>2</sub>O<sub>8</sub> were added, and the mixture heated 24 hr at 50-60.deg. to give 33% I of inherent viscosity 0.2 (.sim.1% in F<sub>2</sub>C<sub>1</sub>CCCl<sub>2</sub>F at 30.deg.).

IT 37745-81-6

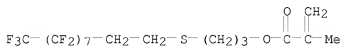
RL: USES (Uses)  
(oil- and soilproofing agents, for textiles)

RN 37745-81-6 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with  
 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl)thio]propyl  
 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and  
 N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 45311-92-0

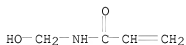
CMF C17 H15 F17 O2 S



CM 2

CRN 924-42-5

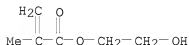
CMF C4 H7 N O2



CM 3

CRN 868-77-9

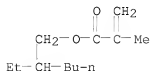
CMF C6 H10 O3



CM 4

CRN 688-84-6

CMF C12 H22 O2



L5 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1972:566120 CAPLUS

DOCUMENT NUMBER: 77:166120

ORIGINAL REFERENCE NO.: 77:27275a,27278a

TITLE: Fluorinated alcohols, methacrylates, and polymers for

textile impregnation

INVENTOR(S): Bloechl, Walter

SOURCE: Ger. Offen., 23 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2110912	A	19720914	DE 1971-2110912	19710308
FR 2128668	A1	19721020	FR 1972-7728	19720306
BE 780312	A1	19720907	BE 1972-114771	19720307
IT 952136	B	19730720	IT 1972-48806	19720307
PRIORITY APPLN. INFO.:			DE 1971-2110912	A 19710308

AB Washfast textile finishes were prepared by first preparing specified types of fluoroalcs., forming the methacrylic esters of the alcs., and copolymerizing these esters with methacrylic esters of nonfluorinated alcs. Thus, C8F17C2H45H was treated with NaOEt and 3-chloropropanol to give C8F17C2H45C3H6OH (I). I reacted with methacryloyl chloride to give C8F17C2H45C3H6O2CC(Me):CH2 (II). II copolymerized with 2-ethylhexyl methacrylate to form 2-ethylhexyl methacrylate-3-[2-(perfluorooctyl)ethylthio]propyl methacrylate copolymer (III) [37165-23-4]. A textile was padded in an emulsion containing 1% MgCl2.6H2O and 0.05-0.4% III, dried at 100.deg., and heated at 170.deg. for 2 min to give a finished fabric with oil repellency 5-6 (AATCC Standard Test Method 22-1952).

IT 37165-23-4  
 RL: USES (Uses)  
 (oil-repellent finishing with, of textiles)

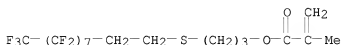
RN 37165-23-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl)thio]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 45311-92-0

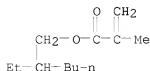
CMF C17 H15 F17 O2 S



CM 2

CRN 688-84-6

CMF C12 H22 O2



IT 37745-81-6P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (preparation of)

RN 37745-81-6 CAPLUS

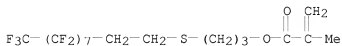


CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with  
 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]propyl  
 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and  
 N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 45311-92-0

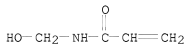
CMF C17 H15 F17 O2 S



CM 2

CRN 924-42-5

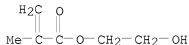
CMF C4 H7 N O2



CM 3

CRN 868-77-9

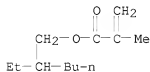
CMF C6 H10 O3



CM 4

CRN 688-84-6

CMF C12 H22 O2



L5 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1972:540734 CAPLUS

DOCUMENT NUMBER: 77:140734

ORIGINAL REFERENCE NO.: 77:23155a,23158a

TITLE: Fluorinated thio ether-acrylic esters and their polymers

INVENTOR(S): Gresham, John Thomas

PATENT ASSIGNEE(S): FMC Corp.

SOURCE: U.S., 7 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3686283	A	19720822	US 1970-80472	19701013
AT 313851	B	19740311	AT 1971-8639	19711006
BE 773825	A1	19720412	BE 1971-109206	19711012
NL 7114029	A	19720417	NL 1971-14029	19711012
FR 2111253	A5	19720602	FR 1971-36580	19711012
CA 941096	A2	19740129	CA 1972-138053	19720324
PRIORITY APPLN. INFO.:			US 1970-80472	A 19701013
			CA 1971-123633	A3 19710924

AB The perfluoroalkyl thio ether acrylate monomers, CH<sub>2</sub>:C(Me)CO<sub>2</sub>(CH<sub>2</sub>)<sub>p</sub>S(CH<sub>2</sub>)<sub>m</sub>CnF<sub>2n+1</sub> (I, M = 2,4; n = 6,8,10; p = 2,3), were prepared and emulsion polymerized to give latexes which rendered cotton

textiles oil and water repellent. The alcs. CnF<sub>2n+1</sub> (CH<sub>2</sub>)<sub>m</sub>S(CH<sub>2</sub>)<sub>p</sub>OH(II) were prepared from CnF<sub>2n+1</sub>(CH<sub>2</sub>)<sub>m</sub>I by treatment with thiourea followed by hydrolysis and treatment with Cl(CH<sub>2</sub>)<sub>2</sub>OH, or by treatment with HS(CH<sub>2</sub>)<sub>p</sub>OH in alc. containing NaOH. Treatment of II with CH<sub>2</sub>:C(Me)COCl or CH<sub>2</sub>:C(Me)CO<sub>2</sub>Me in the presence of a catalyst gave the acrylate monomers which were emulsion polymerized in the presence of K<sub>2</sub>S<sub>2</sub>O<sub>8</sub>. Oil repellency ratings of 4-5 and 100 water repellency spray ratings were measured on cotton treated with 1-1.25 weight% of a 36:64% latex blend of (I, m = 2, n = 8, p = 2) polymers and poly(lauryl methacrylate) [25719-52-2].

IT 36890-76-3

RL: USES (Uses)

(oil- and waterproofing of cotton textiles by)

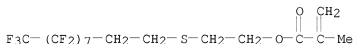
RN 36890-76-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl)thio]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 36097-04-8

CMF C16 H13 F17 O2 S



IT 9087-13-2P 9087-14-3P 36097-01-5P  
 36097-04-8P 36097-06-0P 36880-03-2P  
 36880-04-3P 36880-05-4P

RL: PREP (Preparation)

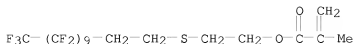
(preparation of)

RN 9087-13-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafluorodecyl)thio]ethyl ester, polymer with 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptafluorodecyl)thio]ethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, N-(hydroxymethyl)-2-propenamide and isodecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

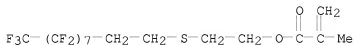
CM 1

CRN 36097-06-0  
CMF C18 H13 F21 O2 S



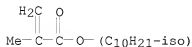
CM 2

CRN 36097-04-8  
CMF C16 H13 F17 O2 S



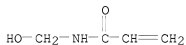
CM 3

CRN 29964-84-9  
CMF C14 H26 O2  
CCI IDS



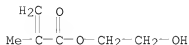
CM 4

CRN 924-42-5  
CMF C4 H7 N O2



CM 5

CRN 868-77-9  
CMF C6 H10 O3



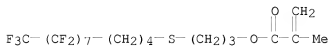
RN 9087-14-3 CAPLUS  
CN 2-Propenoic acid, 2-methyl-, 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl)thio]propyl ester, polymer with 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10,10-heptadecafluorodecyl)thio]propyl 2-methyl-2-propenoate, 3-[(5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-

heptadecafluorododecyl)thio]propyl 2-methyl-2-propenoate, isodecyl  
2-methyl-2-propenoate and 3-[(3,3,4,4,5,5,6,6,7,7,8,8,8-  
tridecafluorooctyl)thio]propyl 2-methyl-2-propenoate (9CI) (CA INDEX  
NAME)

CM 1

CRN 56770-91-3

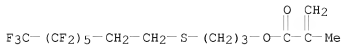
CMF C19 H19 F17 O2 S



CM 2

CRN 56770-90-2

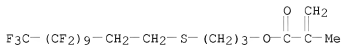
CMF C15 H15 F13 O2 S



CM 3

CRN 56770-89-9

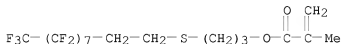
CMF C19 H15 F21 O2 S



CM 4

CRN 45311-92-0

CMF C17 H15 F17 O2 S

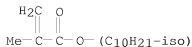


CM 5

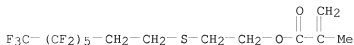
CRN 29964-84-9

CMF C14 H26 O2

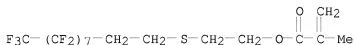
CCI IDS



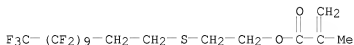
RN 36097-01-5 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl ester (CA INDEX NAME)



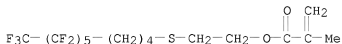
RN 36097-04-8 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-hepta-decafluorodecyl)thio]ethyl ester (CA INDEX NAME)



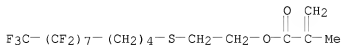
RN 36097-06-0 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12-heneicosafuorododecyl)thio]ethyl ester (CA INDEX NAME)



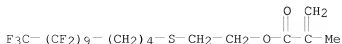
RN 36880-03-2 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[(5,5,6,6,7,7,8,8,9,9,10,10,10-tridecafluorodecyl)thio]ethyl ester (CA INDEX NAME)



RN 36880-04-3 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[(5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-hepta-decafluorododecyl)thio]ethyl ester (CA INDEX NAME)



RN 36880-05-4 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[(5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,13,13,14,14,14-heneicosafuorotetradecyl)thio]ethyl ester (CA INDEX NAME)



DOCUMENT NUMBER: 77:21457  
ORIGINAL REFERENCE NO.: 77:3579a,3582a  
TITLE: Fluorinated acrylic monomers containing hetero atoms and their polymers  
INVENTOR(S): Rondestvedt, Christian S., Jr.  
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co.  
SOURCE: U.S., 8 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 4  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3655732	A	19720411	US 1967-638721	19670516
US 3773826	A	19731120	US 1971-199329	19711116
US 3786089	A	19740115	US 1971-199316	19711116
US 3808251	A	19740430	US 1971-199328	19711116

PRIORITY APPLN. INFO.: US 1967-638721 A3 19670516

AB [(Fluoroalkyl)thio]alkyl acrylates, [(fluoroalkyl)amino]alkyl acrylates, and thioester and amide analogs, CH<sub>2</sub>:C(R)COX(CH<sub>2</sub>)<sub>x</sub>Y(CH<sub>2</sub>)<sub>y</sub>CnF<sub>2n+1</sub> (R = H, Me; X = O, NH, S; Y = S, NH; x = 2, 11; y = 2, 4, n = 4, 6, 8, 10), were prepared and emulsion polymerized to give polymers and copolymers useful for oil-

and waterproofing of textiles. Thus, reaction of CH<sub>2</sub>:CH(CH<sub>2</sub>)9OH with C<sub>4</sub>F<sub>9</sub>I in the presence of azobisisobutyronitrile gave C<sub>4</sub>F<sub>9</sub>(CH<sub>2</sub>)<sub>11</sub>OH, which was treated with p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>Cl and then HSCH<sub>2</sub>CH<sub>2</sub>OH to give C<sub>4</sub>H<sub>9</sub>(CH<sub>2</sub>)<sub>11</sub>S(CH<sub>2</sub>)<sub>2</sub>OH (I). Reaction of I with CH<sub>2</sub>:CMeCOC<sub>1</sub> gave 2-[(12,12,13,13,14,14,15,15,15-nonafluoropentadecyl)thio]ethyl methacrylate (II) [35180-63-3]. A mixture of haloethanes, azobisisobutyronitrile, and II was heated for 14.5 hr at 80.deg. to give poly(2-[(12,12,13,13,14,14,15,15,15-nonafluoropentadecyl)thio]ethyl methacrylate) [35165-52-7] which, when coated on a cotton fabric at 4% and cured 3 min at 165.deg., had oil repellency 2 and water repellency 70.

IT 35165-52-7 36642-82-7 36657-74-6  
36683-03-1  
RL: USES (Uses)  
(finishing agents, for textiles)

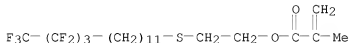
RN 35165-52-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(12,12,13,13,14,14,15,15,15-nonafluoropentadecyl)thio]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 35180-63-3

CMF C21 H31 F9 O2 S



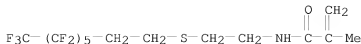
RN 36642-82-7 CAPLUS

CN 2-Propenamide, 2-methyl-N-[2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl]-, homopolymer (9CI) (CA INDEX NAME)

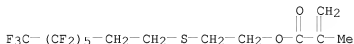
CM 1

CRN 36097-09-3

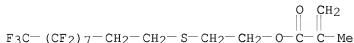
CMF C14 H14 F13 N O S



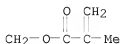
RN 36657-74-6 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl ester, homopolymer (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 36097-01-5  
 CMF C14 H13 F13 O2 S



RN 36683-03-1 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, polymer with 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 36097-04-8  
 CMF C16 H13 F17 O2 S



CM 2  
 CRN 688-84-6  
 CMF C12 H22 O2



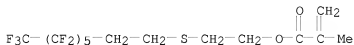
Et-CH-Bu-n

IT 35180-63-3P 36097-01-5P 36097-04-8P  
 36097-06-0P 36097-09-3P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (preparation of)  
 RN 35180-63-3 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 2-[(12,12,13,13,14,14,15,15,15-nonafluoropentadecyl)thio]ethyl ester (CA INDEX NAME)



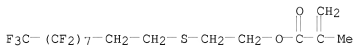
RN 36097-01-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl ester (CA INDEX NAME)



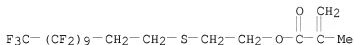
RN 36097-04-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl)thio]ethyl ester (CA INDEX NAME)



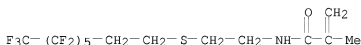
RN 36097-06-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,12,12,12-heneicosafuorododecyl)thio]ethyl ester (CA INDEX NAME)



RN 36097-09-3 CAPLUS

CN 2-Propenamide, 2-methyl-N-[2-[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)thio]ethyl]- (CA INDEX NAME)



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(FILE 'HOME' ENTERED AT 14:42:59 ON 16 JUN 2008)

FILE 'REGISTRY' ENTERED AT 14:43:11 ON 16 JUN 2008

L1 STRUCTURE UPLOADED

L2 2 S L1

L3 59 S L1 FULL

FILE 'CAPLUS' ENTERED AT 14:44:02 ON 16 JUN 2008

L4 20 S L3

L5 17 S L4 NOT PY > 2005